

**ARCHAEOLOGICAL SURVEY OF THE HEIGHTS OF SHADOW CANYON MDP,
BEXAR COUNTY, TEXAS**

Prepared for

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ABSTRACT

SWCA Environmental Consultants (SWCA) conducted a cultural resource survey on behalf of Ryland Homes of the roughly 225-acre Heights of Shadow Canyon Master Development Plan (MDP) project area located just south of State Highway (SH) 16 in Bexar County, Texas. The tract is currently proposed for residential development, and the work was done in compliance with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code. SWCA's investigations of the Heights of Shadow Canyon MDP included a background review and pedestrian survey of selected areas within the project area.

The background review revealed that one previous archaeological survey was performed in the southeastern portion of the project area and recorded one site within the current project area (41BX156). Site 41BX156 is a surficial lithic scatter of an unknown age, due to the lack of diagnostic material. It is located at the southeastern portion of the proposed project area and had been disturbed by a borrow pit and two-track road. The previous researchers suggested a more intensive survey prior to determinations of significance.

During the SWCA field investigation, archaeologists surveyed the roughly 225-acre tract of the proposed Heights of Shadow Canyon MDP, focusing on upland drainages and adjacent terraces and slopes. The higher upland elevations were not extensively surveyed due to the extremely shallow soils and the very low probability to locate intact cultural deposits with integrity and significance. The pedestrian survey established that the entire project area is an upland setting with no potential for buried cultural resources, including the upland drainages and adjacent terraces. During field investigations at the location of the previously recorded site, SWCA archaeologists did not encounter any remnants of 41BX156. SWCA observed disturbances from vegetation clearing, grading, and road construction that may have destroyed the site.

Based on the results of the survey, SWCA recommends that there are no significant cultural resources in the Heights of Shadow Canyon MDP project area. No additional archaeological investigations are recommended.

MANAGEMENT SUMMARY

PROJECT TITLE: Archaeological Survey of the Heights of Shadow Canyon MDP, Bexar County, Texas.

SWCA PROJECT NUMBER: 10582-192.

PROJECT DESCRIPTION: The roughly 225-acre Heights of Shadow Canyon MDP project area is proposed for residential development. SWCA was contracted to conduct an archaeological survey of the project area, as the proposed development would involve various surface and subsurface impacts related to the construction of residential housing, utilities, residential streets, and landscaping. The investigation included a background literature review and a pedestrian survey focusing on upland drainages and the adjacent terraces and slopes. The upland areas of the project area were not intensively surveyed. The goal of the field survey was to identify and assess any significant cultural resources that might be impacted by the proposed residential development project.

LOCATION: The Heights of Shadow Canyon tract is an irregularly shaped 225-acre parcel of land north of Helotes, Texas. The project area is in northern Bexar County just south of SH 16. The southeastern corner of the project area is located at the western end of Ranch Parkway. The project area appears on the Helotes, Texas USGS 7.5-minute quadrangle.

NUMBER OF ACRES SURVEYED: Approximately 225 acres.

PRINCIPAL INVESTIGATOR: Mindy L. Bonine.

DATES OF WORK: November 16, 2005.

PURPOSE OF WORK: The client is complying with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code.

NUMBER OF SITES: One previously recorded site (41BX156).

ELIGIBILITY OF SITES: Site 41BX156 is believed to be destroyed, and as such does not have any integrity or research value. Thus, it would not be considered eligible for the National Register of Historic Places or for listing as a State Archeological Landmark.

CURATION: No artifacts were collected and nothing was curated.

COMMENTS: The project area consists of small rocky hills, and between them, small dry drainages with colluvial and possibly alluvial soils surrounding them. A modern water tower was located in the project area, but no other standing structures were observed. No chert outcrops were observed as sources of lithic material, and few opportunities for reliable water exists within the project area. Site 41BX156 was not relocated, and no other archaeological sites were found during the survey. No further archaeological investigations are recommended.

INTRODUCTION

SWCA Environmental Consultants Inc. (SWCA) was contracted by Ryland Homes to conduct an archaeological survey of the approximately 225-acre Heights of Shadow Canyon subdivision located just south of State Highway 16 at the western end of Ranch Parkway in Bexar County, Texas (Figure 1). The work was done in support of the Heights of Shadow Canyon Master Development Plan (MDP), which is subject to review by the City of San Antonio. The tract is currently proposed for residential development.

The investigation consisted of an archaeological background review followed by a surface pedestrian survey of the project area. The purpose of the investigation was to determine if the undertaking would adversely affect significant cultural resources and to assist in complying with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code. Mindy L. Bonine served as Principal Investigator and three SWCA archaeologists conducted the fieldwork on November 16, 2005.

DEFINITION OF STUDY AREA

The Heights of Shadow Canyon subdivision is an irregularly shaped 225-acre parcel of land north of Helotes, Texas (Figure 2). The project area is in northern Bexar County, just south and west of State Highway (SH) 16. The southeast corner of the project area connects with the western terminus of Ranch Parkway. Apacheria Road spurs off of Ranch Parkway to the north and curves to the west to traverse through the center of the project area. The project area is located on the Helotes USGS 7.5-minute topographic map.

The entire parcel occupies an upland setting in an area of oak-juniper woodland. The vegetation includes live oak, juniper, mesquite, and

persimmon, with an understory of grasses, cacti, Spanish dagger, agarita, acacia, and greenbrier (Figure 3). The general topography of the project area consists of an upland ridge traversing the central portion of the area, running east-west, with the land sloping downward on either side. The slopes are cut by several small dry upland drainages that lead to one larger intermittent drainage to the north (running roughly east-west) and two deeply incised dry drainages to the south. These southern drainages flow into Ranch Creek, which runs generally northwest-southeast to the south of the project area.

A water tank, associated pipes, and power lines stand at the highest elevation in the project area (Figure 4). Well under 50 years of age, the water tank is maintained by the San Antonio Water Supply. Additionally, a high-voltage transmission line cuts through the center of the project area running generally northwest-southeast. Other disturbances include numerous road cuts that transect the project area. The road cuts appeared to be unfinished residential streets for a proposed subdivision development that was later abandoned or extensively revised into the current plan (Figures 5 and 6).

The project area is mapped as Cretaceous-age Edwards Limestone. These limestone deposits are 300–500 feet thick and contain abundant fine- to coarse-grained chert concretions, along with fossils and shell fragments (Barnes 1983). Just north of the project area the geology changes to the earlier Cretaceous Glen Rose formation. This formation is characterized as fossiliferous and contains limestone, dolomite, and marl as resistant and recessive beds that form a stair-step topography (Barnes 1983).

The majority of the project area is mapped as Tarrant Series soils. These soils are stony and very shallow, dark colored, and gently undu-

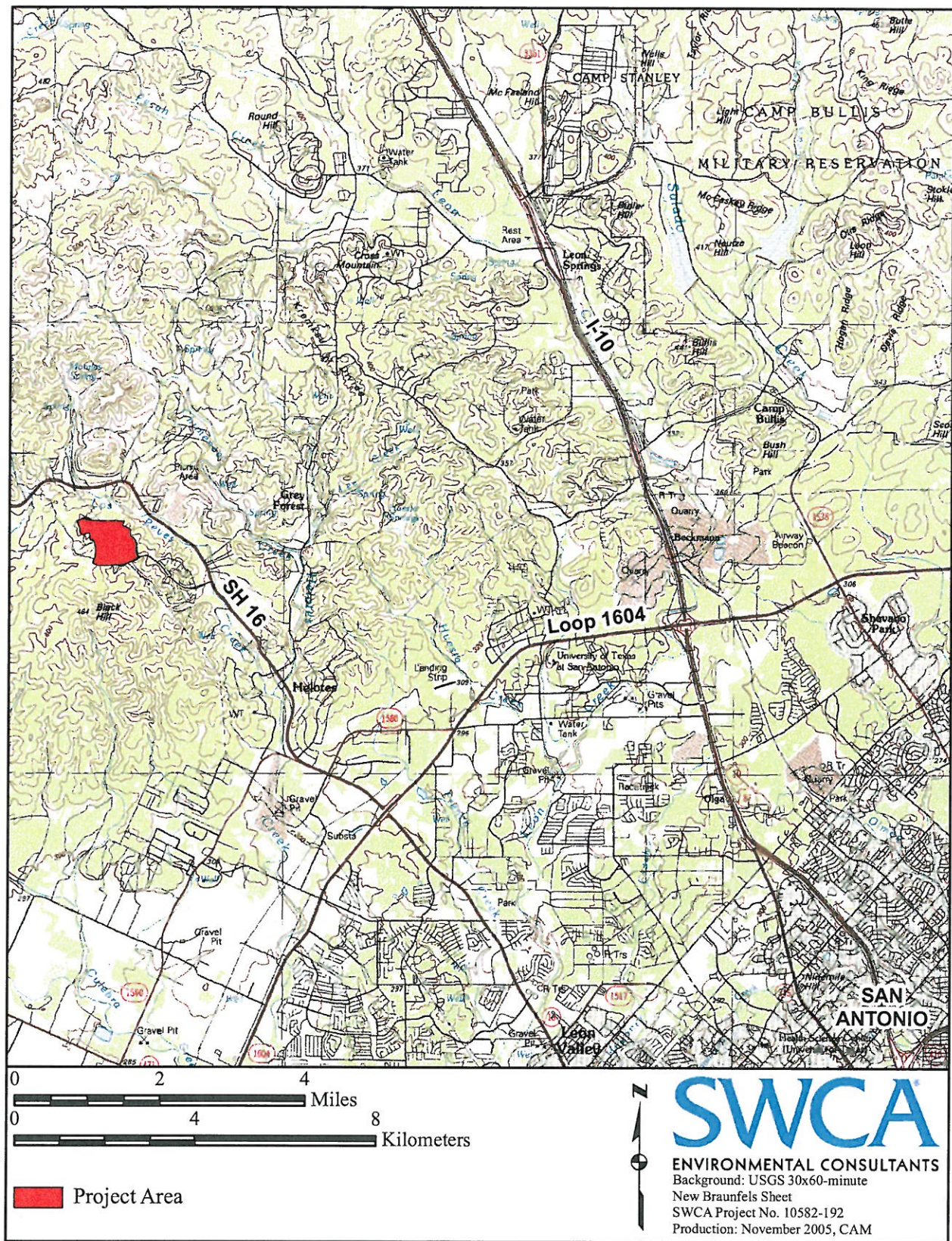


Figure 1. Project location map.

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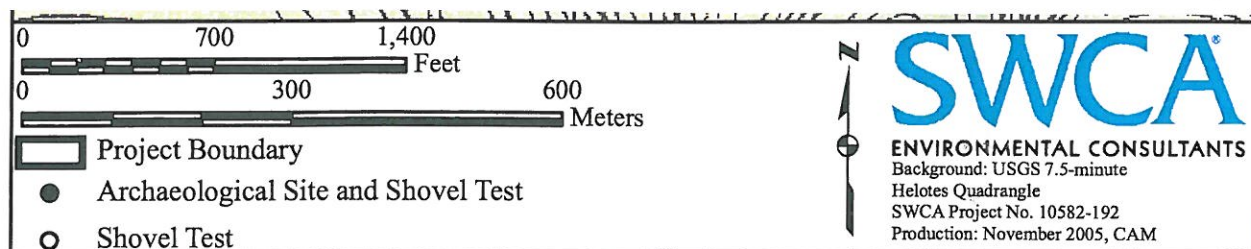


Figure 2. Project area map.



Figure 3. Typical vegetation found within the project area. Note the thin soils.



Figure 4. Water tank located at the highest elevation in the project area (facing west).

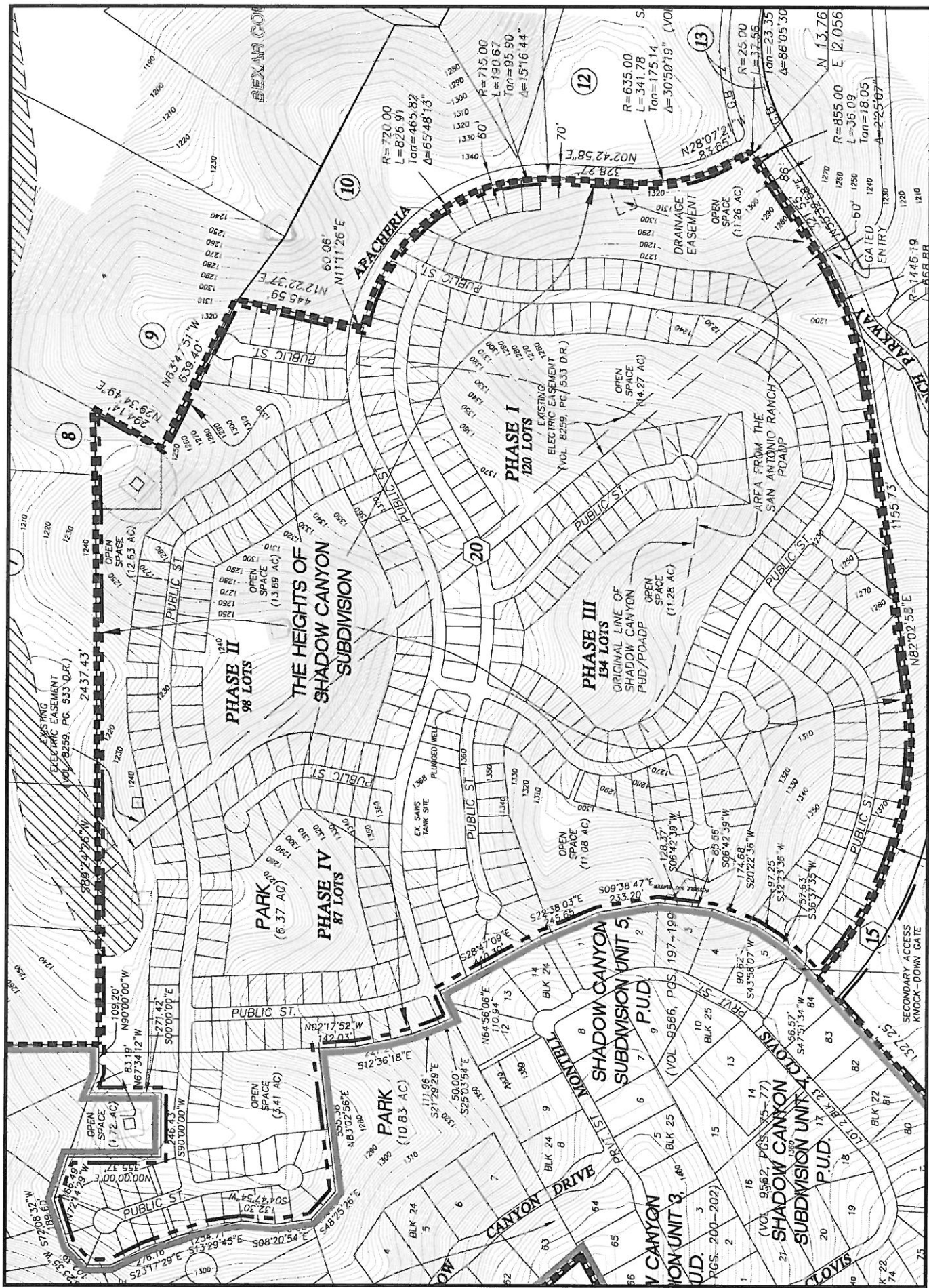


Figure 5. Subdivision plan for the Heights of Shadow Canyon MDP.



Figure 6. One of a network of road cuts through the project area, facing west.

lating to steep (Taylor et al. 1962). The surface layer is very dark grayish-brown, calcareous clay loam and is about 20 inches thick in places. This layer is crumbly and friable with abundant limestone fragments. Tarrant soils are residual and form shallowly over hard limestone (Garner and Young 1976; Taylor et al. 1962). These stony soils have a low potential to contain buried cultural resources with good integrity.

Two areas along the upland drainages, at the very edges of the project area on the north and south sides, are mapped as Krum soils. These soils are frequently flooded and are developed from the slope alluvium of limestone prairies (Taylor et al. 1962). Krum soils, because they are alluvial, have a potential to contain buried cultural resources with good integrity. However, during SWCA's field investigation of these areas, they appeared to be primarily Tarrant Series soils, with no transition to Krum soils observed.

The project areas are located within the Edwards Plateau region as defined by Gould (1975), and the Balconian biotic zone (Blair 1950). Upland areas are dominated by a mixed live oak (*Quercus virginiana*) and Ashe juniper (*Juniperus ashei*) woodland interspersed with occasional grassy openings. The lower elevation areas, especially along the riparian zone, often include a dense understory of acacia (*Acacia* sp.), prickly pear (*Opuntia leptocaulis*), and other brushy species (Petrides 1988; Simpson 1988). Common mammals of the Balconian biotic zone include white-tailed deer (*Odocoileus virginianus*), opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), nine-banded armadillo (*Dasypus novemcinctus*), black-tailed jackrabbit (*Lepus californicus*), and deer mouse (*Peromyscus maniculatus*). In addition, bison (*Bison bison*), mountain lion (*Felis concolor*), and black bear (*Ursus americanus*) would have been present prehistorically (Davis and Schmidly 1994).

Bird species composition in the project area is fairly diverse with numerous breeding, migrant, and wintering species present (Davis and Schmidly 1994). In addition to mammals and birds, Blair (1950) lists at least 75 species of amphibians and reptiles within the Balconian Province.

The proposed development involves the construction of a residential neighborhood. The approximately 225-acre project area will be platted into around 400 residential lots with streets, alleys, and utilities. Several open spaces around the project area will be left undeveloped, totaling about 15 percent.

METHODS

BACKGROUND REVIEW

SWCA performed a background records review to determine if the project area has been previously surveyed for cultural resources or if any archaeological sites have been recorded within or near the project area. To conduct this review, an SWCA archaeologist reviewed the Helotes, Texas USGS 7.5-minute topographic quadrangle map at the Texas Archeological Research Laboratory (TARL) and the Texas Historical Commission (THC), and searched the THC's Texas Archeological Site Atlas (Atlas) and site files at TARL. These sources provided information on the nature and location of previously conducted archaeological surveys, previously recorded cultural resource sites, locations of National Register of Historic Places (NRHP) properties, sites designated as State Archeological Landmarks (SALs), Official Texas Historical Markers (OTHMs), Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. SWCA also examined the *Soil Survey of Bexar County, Texas* and the *Geologic Atlas of Texas, San Antonio Sheet*. A review of aerial photographs on the City of San Antonio's GIS Mapping Applica-

tion, an online resource (<http://maps.san-antonio.gov/website/COSA-Maps/viewer.asp>) was conducted to assist in determining whether any standing structures or features are located on the property and utilized maps and photos.

FIELD METHODS

SWCA conducted a cultural resource survey of the project area to determine the nature, extent, and if possible, significance of cultural resources located within the property boundaries. The survey consisted of three archaeologists first driving through the project area and identifying the locations where shovel testing would be required and where a surface reconnaissance would be sufficient. Particular emphasis was placed on the upland drainages within the project area, as these landforms have a higher probability for containing buried cultural material. The upland areas were not as extensively surveyed due to the shallow soils and the low probability of intact buried cultural deposits with integrity and significance. During the survey, the ground surface and erosional profiles were examined for cultural resources. If the depth of soils allowed shovel testing, shovel tests were 30 cm in diameter and excavated to bedrock or culturally sterile deposits. The matrix from each shovel test was screened through ¼-inch mesh, and the location was recorded on a global positioning system (GPS) receiver. A shovel test form was completed for each test.

RESULTS

BACKGROUND REVIEW

The background literature review identified 15 archaeological sites within 1 mile of the project area, and the THC records indicated that five cultural resource surveys have been conducted within 1 mile of the project area. Of the five surveys within 1 mile of the project

area, one investigation conducted in 1972 by the Department of Housing and Urban Development (HUD) included the southeast corner of the project area. The 1972 survey located five prehistoric archaeological sites at the time (41BX153–41BX161), one of which is within the current project area. Site 41BX156 is a small surficial lithic scatter of unknown temporal setting (TARL site form). The depth of soils at the site was described as 1 foot, and although no diagnostic material or features were located at the site, the researchers made recommendations for an intensive survey.

FIELD SURVEY

The field survey of the Heights of Shadow Canyon MDP determined that the entire project area occupies an upland setting with no potential for buried cultural resources. Even areas mapped as alluvial soils exhibited very shallow rocky upland soils. Exposed limestone bedrock was present in most of the project area and shovel testing was minimally utilized due to the shallow nature of the soils (Figures 7 and 8). The lowest elevations in the project area, which include an upland drainage along the northern edge of the project area and two incised drainages to the south, also contained very shallow soils. Bedrock exposures were easily visible within most of the northern drainage and within the easternmost drainage on the south side. One shovel test was placed in the northernmost drainage to confirm the shallow depth (Table 1; ST 3). The westernmost drainage on the south side was covered with juniper duff and not as easily visible. One shovel test was excavated within this area to confirm the shallow depth of these soils (Table 1; ST 1).

In addition to the pedestrian survey, the location of previously recorded site 41BX156 was reinvestigated, and one shovel test was excavated at the site location (Table 1; ST 2). The site is located at the southernmost edge of the



Figure 7. Example of shallow soils and stony surface within project area.



Figure 8. Example of exposed bedrock within the project area.

Table 1. Shovel Tests in Project Area

Shovel Test #	Site	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	none	0-5	10YR4/2	Dark grayish brown	Clay loam	Limestone	Degrading limestone bedrock and no cultural materials
2	41BX156	0-10	10YR2/2	Dark brown	Clay loam	Limestone	Degrading limestone bedrock and no cultural materials
3	none	0-5	10YR2/2	Dark brown	Clay loam	Limestone	Degrading limestone bedrock and no cultural materials

project area, situated on a small terrace overlooking the westernmost incised drainage, just before the drainage meets up with Ranch Creek. A description of the current condition of the site is described below.

41BX156

Site 41BX156 was previously recorded in 1972 and was described as a small prehistoric lithic scatter of an unknown temporal setting. The types of cultural materials noted include debitage, a utilized flake, and two bifaces. At the time the site was recorded, it contained a generally small scatter of artifacts, about 30 m in diameter, and was confined to the surface (TARL site form). The previous investigators noted a borrow pit adjacent to the site and impacts from a two-track road. During SWCA's investigations of 41BX156, no cultural material was observed on the ground surface. To examine the depth of deposits, one shovel test was excavated on the site; the shovel test encountered sterile shallow stony soils about 10 cm deep (see Table 1). No cultural material was located in the shovel test. The 1-foot deep soils recorded on the site form were not found within the site area or anywhere nearby. In addition, an aerial photograph taken in 1995 indicates vegetation clearing, grading, and road construction activities have significantly disturbed the site, which was also confirmed during the field investigation (Figure 9).

The location of previously recorded site 41BX156 was found to contain no cultural material, features, or diagnostic artifacts. Based on the previously recorded information, the site may have represented a mixture of cultural material deposited over several thousand years. The absence of cultural material during the current survey indicates the site has been destroyed, most likely through a combination of erosion processes or land clearing activities. Since no portion of site 41BX156 remains intact and no cultural materials were encountered, it is not considered significant,

and no additional investigations are recommended.

SUMMARY AND RECOMMENDATIONS

SWCA was contracted to conduct an archaeological survey of the approximately 225-acre Heights of Shadow Canyon subdivision located at the western end of Ranch Parkway in Bexar County, Texas. The work was conducted in compliance with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code and designed to determine if the undertaking would adversely affect significant cultural resources. The investigation consisted of an archaeological background review followed by a surface pedestrian survey of the project area, focusing on landforms that may contain intact buried cultural deposits, such as upland drainages and adjacent terraces and slopes. The upland areas were not extensively surveyed due to the extremely shallow soils and the very low probability to locate intact cultural deposits with integrity and significance. The background review determined that a small portion of the project area had been surveyed in 1972 and several recorded sites are nearby. One previously recorded site, 41BX156, was located within the project area.

The pedestrian survey established that the entire project area is an upland setting with low potential for intact buried cultural deposits. Site 41BX156, situated near the southern edge of the project area, was not relocated. As SWCA's investigations at the site encountered vegetation clearing, grading, and road construction, it is believed that the site has been destroyed.

Based on the results of the investigations, SWCA concludes that there are no significant cultural resources in the Heights of Shadow Canyon MDP project area. No additional archaeological investigations are recommended.

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Figure 9. Aerial photograph of the location of site 41BX156, which shows the cleared vegetation, grading, and road disturbances in and around the site.

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